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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	, ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/019,448	04/08/2002	Yasutaka Ito	217551US2PCT	4361		
22850 7	7590 · 07/28/2003					
,	VAK, MCCLELLANI	EXAMINER				
	1940 DUKE STREET ALEXANDRIA, VA 22314			LAM, CATHY FONG FONG		
•			ART UNIT	PAPER NUMBER		
		•	1775	14		
		DATE MAILED: 07/28/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

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•		Application No.		Applicant(s)	V				
		10/019,448		ITO ET AL.					
Office Action Summary		Examiner		Art Unit					
		Cathy Lam		1775					
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover	sheet with the c	orrespondence ad	ldress				
THE I - Externanter - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply or period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, howen within the statutory min will apply and will expire s cause the application to	ever, may a reply be tim imum of thirty (30) days SIX (6) MONTHS from b become ABANDONEI	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).	iy. ommunication.				
1)⊠	Responsive to communication(s) filed on May	<u> 27<sup>th</sup> 2003</u> .							
2a)⊠	This action is FINAL. 2b) Th	is action is non-fi	nal.						
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
·	ion of Claims								
•	Claim(s) <u>17-21</u> is/are pending in the application								
	4a) Of the above claim(s) is/are withdray	wn from consider	ation.						
·	Claim(s) is/are allowed.								
	Claim(s) <u>17-21</u> is/are rejected.								
, —	Claim(s) is/are objected to.	14::							
-	Claim(s) are subject to restriction and/o ion Papers	r election require	ment.						
9) 🗌 🤈	The specification is objected to by the Examine	r.							
10) 🔲	The drawing(s) filed on is/are: a)□ accep	oted or b) object	ed to by the Exai	miner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12)☐ The oath or declaration is objected to by the Examiner.									
	under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a)	☐ All b)☐ Some * c)☐ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
* 5	3. Copies of the certified copies of the prior application from the International Bu See the attached detailed Office action for a list	reau (PCT Rule 1	17.2(a)).		Stage				
	Acknowledgment is made of a claim for domesti				l application).				
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachmen				. —					
2) Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) 13	4)		r (PTO-413) Paper No Patent Application (PT					
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In view of the amendment and remarks filed on May 27<sup>th</sup> 2003, the pending claims are continued to be unpatentable as following:

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa (US 6475606) in view of Bogdanski et al (US 6150636) or Soma et al (US 5231690).

Niwa discloses a ceramic heater comprised of a ceramic substrate and a resistance heating element.

The ceramic substrate is an inorganic material which is a nitride ceramic material (col 3 L 64-67). The ceramic substrate has a thickness not exceeding 25 mm and a diameter of not less than 200 mm (col 3 L 28-30 & L 49-52). The resistance heating element is disposed on the bottom face of the ceramic substrate (col 6 L 41-43). The examiner takes the position that the bottom face is the first surface of the ceramic substrate. From Fig. 3 the ceramic heater has a disc shape.

Niwa is silent about the circumference of the heating element is within 35mm from the side face of the ceramic substrate.

Bogdanski teaches an electric hotplate comprised of a circular shape ceramic substrate and a resistance heating element (col 6 L 20-22 & L 34-35).

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Bogdanski further teaches that the heating element extends up to a distance from the outer rim of the ceramic substrate, preferably over the entire upper cooking surface of the electric hotplate (col 6 L 46-50).

Soma also teaches a heater comprised of an inorganic substrate and a resistance heating element (col 3 L 9-14 & L 49-51).

The resistance heating element (7) is formed within the silicon nitride substrate (6) and over the entire discoidal substrate (6) (col 6 L 10-12 & Fig. 3).

In view of the prior art teachings, it would have been conventional and obvious that a heater would having a heating element that is at least formed over half of the ceramic substrate or over the entire ceramic substrate (ie. from the center of the substrate), because it would give a more uniform heating and cooling to the entire ceramic substate.

## Response to Arguments

3. Applicant's arguments filed on May 27<sup>th</sup> 2003 have been fully considered but they are not persuasive. In response to applicant's arguments against the Bogdanski and Soma references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Bogdanski and Soma were used to show that having a resistance heating element over the entire surface of the ceramic substrate, or very close to the edge of the ceramic substrate is conventional.

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## Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (703) 308-2418. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (703) 308-3822. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9604 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Cathy Lam

Primary Examiner Art Unit 1775 Page 5

cfl July 26, 2003